



The Leibniz Institute for Astrophysics Potsdam (AIP) is a publicly funded German research institute with a long record in history, which includes the Berlin Observatory and the Astrophysical Observatory Potsdam. The latter was the world's first observatory to emphasize explicitly the research area of astrophysics. Today, AIP has an international reputation as a competence center for the development of research technology in the fields of spectroscopy, robotic telescopes, and E-Science. About 130 scientists work on a variety of astrophysical topics such as magnetic fields, solar and stellar physics, stellar and galactic evolution, and cosmology. As a staff member of AIP, you will have the advantage to live in the Berlin-Potsdam metropolitan area as well as enjoying the calm, family-friendly area of Potsdam-Babelsberg for your work place.

The AIP invites applications for a

Doctoral Researcher in Solar Physics (m/f/d)

The position is in the Solar Physics department within the project “LOFAR observations of the solar corona during Parker Solar Probe perihelion passages” supported by the German Research Foundation (DFG) as part of the Polish - German funding initiative “BEETHOVEN CLASSIC 3”, in collaboration with the University of Warmia and Mazury in Olsztyn, Poland.

The LOFAR (LOW Frequency ARray) Key Science Project (KSP) "Solar Physics and Space Weather" has performed observing campaigns during the first three Parker Solar Probe (PSP) perihelia, and plans further ones in over the next years. These campaigns consist of multiple observing modes that provide imaging data and dynamic radio spectra, as well as interplanetary scintillation observations probing the heliosphere.

The focus of the PhD is on the physical interpretation of these data. This includes the identification, characterisation, and plasma physical modeling of solar radio bursts, e.g. type III caused by energetic electron beams. It covers all aspects of non-thermal electron and radio wave generation and propagation through the solar corona and in interplanetary space, and the joint analysis of LOFAR data with space-borne instruments like PSP, Solar Dynamics Observatory (SDO), and the future Solar Orbiter.

We are seeking a highly motivated PhD student who has achieved a Master's degree in Physics or Astronomy when starting on the job. Previous experience in space plasma physics, solar physics, and/or solar radio astronomy, with interferometric data or the LOFAR software environment is desirable. Basic programming skills and experience in working with data from space missions are an additional plus.

The appointment is a fixed-term contract for three years and could start on 1 February 2020. The salary is based on the German public service scale (50% TV-L E13). It includes employer contributions to medical and dental insurance, maternity leave and retirement benefits. The PhD student will be enrolled at the University of Potsdam, which will also grant the doctoral degree.

The AIP is an equal opportunity employer, values diversity and particularly encourages applications of women. Preference will be given to people with disabilities with equal competence.

Applications for and inquiries about the doctoral position should be sent preferably by email to bewerbung_2019-28@aip.de. To apply, please send a single PDF containing curriculum vitae with publications, transcripts, and motivation letter including statements on education, skills and experience. If applicable, please attach separately copies of Bachelor and/or Master Theses. Applicants should also arrange for two letters of recommendation to be sent. Complete applications received by 6 January 2020 will receive full consideration.

Contact:

Leibniz-Institut für Astrophysik Potsdam (AIP)
attn. Dr. Christian Vocks
An der Sternwarte 16
14482 Potsdam, Germany

